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(54) Method and system for sending of messages to a recipient via any of a plurality of different messaging systems

Verfahren und System zum Senden von Nachrichten an einen Empfänger über eines einer Vielzahl von unterschiedlichen Nachrichtenübermittlungssystemen

Procédé et système pour envoyer des messages à un destinataire par voie d'un système de messagerie choisi d'une pluralité de systèmes de messagerie différents

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• **CROAK M R: "UNIFIED MESSAGING WILL
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Description

Technical Field

[0001] The invention generally relates to messaging systems. More specifically the invention relates to a method and a corresponding system for enabling the sending of messages to a recipient via any of a number of messaging systems of different types.

Background of the Invention

[0002] In today's communication environment there are a number of different systems for communicating messages between users, such as the Internet, mobile systems and the Public Switched Telephone Network (PSTN). These communication systems have different addressing principles, types of messages (e.g. text or voice) etc. Furthermore one single person usually have one or more addresses in each of these communication systems, such as one e-mail address, one mobile phone number, one fixed phone number etc.

[0003] The fact that each person are reachable in a number of different communication networks and that different addresses and message types are used in these messaging systems gives rise to a number of problems. One of the problems is that it is hard for an originator to keep track of all the addresses of a recipient. Another problem is and that the originator needs to try on some or even all of the different addresses before one address is found at which a recipient is currently reachable. Furthermore, the originator needs to use different interfaces to reach the different addresses, e.g. to send a Short Message System (SMS) message to a recipient the originator needs to connect to a SMS center (SMS-C) and to send an e-mail the originator needs to connect to an e-mail system.

[0004] Furthermore, even if a recipient is currently reachable on one of the addresses, such as an e-mail address, it might be the case that the originator has no possibility to send an e-mail at the time. For example, the originator might just have access to a Plain Old Telephone (POTS) Service telephone or a mobile phone at the time. A similar problem arises when the originator only has access to a POTS telephone and the recipient only is available on a mobile phone, but only via SMS messages since the recipient is in a meeting and cannot accept voice communication.

[0005] The problems are especially acute when the originator is away from his or hers office or home, such as when travelling. In this case the originator could carry a portable computer and some kind of mobile device in order to alleviate the problems above to some extent. Still, the originator needs to perform a number of steps in order to find an address on which the recipient is currently available, such as connecting to an e-mail system and typing a message, connecting to a mobile network and typing an SMS message or placing a call etc. As

described the message needs to be repeated for each try. Furthermore, the environment the originator is currently in might not be suitable for typing messages. For example, this is the case when the originator is currently driving a car, walking etc.

[0006] EP 0 924 918 discloses a multimedia call signaling end system comprising a calling agent for connection to a network for coordinating the establishment of a connection between a calling terminal served by the calling agent and another terminal. Call setup comprises the reception of a call setup request including a user identifier and the sending of a setup e-mail to an e-mail address corresponding to the user identifier.

Summary of the Invention

[0007] The invention provides a way to enable the sending of messages to a recipient via any of a number of messaging systems of different types, such as an e-mail system, an SMS system etc.

[0008] According to one aspect of the invention, a method is provided. In the method addresses for the recipient are stored, an originator input including an identification of the recipient is received and an address among the stored addresses is chosen, and the messaging system associated with the chosen address is identified.

[0009] According to another aspect of the invention a system is provided. The system comprises first interface means connected to the messaging systems and second interface means for receiving an originator input including an identification of the recipient. The system further comprises memory means for storing addresses for said recipient, and first processing means for choosing an address of the stored addresses and for identifying the messaging system associated to the chosen address.

[0010] By storing addresses of the recipient and identifying the message systems associated to the addresses, the invention facilitates an originator to send a message to a recipient via any of the message systems without having to remember the different addresses of the recipient or decide in advance which message system to use. In other words the invention provides a unified way for an originator to address a recipient in all the message systems associated with the stored addresses. Furthermore, the invention provides a common interface for sending messages to a recipient via different messaging systems by means of a common interface to the different messaging systems.

[0011] The first interface means of a system according to the invention is advantageously provided with the ability to send messages to said recipient via the messaging system associated with the chosen address. In this way, when an originator input is received that further to the recipient identification also includes a message, this message is sent to the chosen address via the first interface means. This feature provides the origina-

tor with a common interface to send messages, such as SMS or e-mail messages, to a recipient in any of the different messaging systems.

[0012] The system according to the invention is further advantageously provided with means for receiving the originator input as a voice input and means for converting the voice input to text. One of the advantages of this feature is that it provides a common and simple interface for the originator to access the system according to the invention. Thus, the originator can use any communication means providing a voice interface, such as a mobile telephone or a POTS telephone, when connecting to the system according to the invention. Together with the feature above that provides a common interface to send messages to a recipient in any of different messaging systems, this feature enables the originator to use, for example, a mobile telephone or even a POTS telephone to send SMS or e-mail messages to the recipient. This can be done without having to type the message.

[0013] Further according to the invention, availability information from said messaging systems could be received. This recipient availability information is interpreted so as to determine in which of said messaging systems said recipient is currently available. In other words the system according to the invention can keep track of in which of the messaging systems the recipient may currently be reached. The address to be chosen can then be chosen among the addresses associated with the messaging systems in which the recipient is currently available. This has the further advantage that when an originator sends a message to a recipient, the message will be sent via a message system in which the recipient is currently available.

[0014] The availability information could, if the messaging system is a mobile telephone system, be information from an Home Location Register (HLR) or a Visitor Location Register (VLR) indicating whether the recipient is attached to the mobile telephony system, or information from a SMS-C indicating whether a test SMS message has been successfully delivered. The HLR, VLR and SMS-C relate to a GSM system. Of course a similar feature could be provided in a mobile telephone system of some other type, using information from devices corresponding to the HLR, VLR and SMS-C in these other systems.

[0015] Another advantageous feature of the invention is that the recipient can store a preferred address for communication. The address that will be chosen can then be the preferred address. For example, the recipient can change the preferred address to indicate the currently preferred address. This can be seen as an alternative way of sending availability information.

Brief Description of the Drawings

[0016] The invention will now be further elucidated by way of exemplary embodiments described hereinafter

with reference to the accompanying drawings in which similar reference numbers denote similar features, and in which:

Figure 1 is a schematic diagram of system in which a system according to the invention is embodied;
Figure 2 is a more detailed diagram of a part of the system in figure 1;

Figure 3 is a more detailed diagram of another part of the system in figure 1;

Figure 4 is a flow chart of an embodiment of a method according to the invention;

Figure 5 is a flow chart of the processing performed by a voice system and a message server according to an embodiment of the invention;

Figure 6 is a flow chart with exemplifying operations for acquiring availability information in the embodiment referred to by figure 4; and

Figure 7 is a flow chart with another set of exemplifying operations for acquiring availability information in the embodiment referred to by figure 4.

Detailed Description of the Invention

[0017] In a system in which a system according to the invention is embodied, as shown in figure 1, an originator can connect from a terminal 101 to a message server 102 via a voice system 103. This then enables the originator to send messages to a recipient terminal, such as a mobile terminal 104 connected to a mobile network 105 or a computer terminal 106 connected to a computer network 107, e.g. the Internet. The voice system 103 includes fourth interface means 108, which can interpret a voice input from the originator. The fourth interface means 108 are connected to converting means 109 for voice-to-text and text-to-voice conversion. The converter means 109 convert the voice input from the originator to text in order to create a text input that is readable to the message server 102.

[0018] The message server 102 includes second interface 110 connected to the voice system 103, which second interface means 110 can receive the text input. The second interface means 110 are also connected to first processing means 111, such as a computer, which interprets and processes the text input. The message server 102 also includes storage means 112, such as a database, for storing recipient information, such as recipient addresses and preferences, and first interface means 113, 114 for connecting the message server 102 to the message systems 105, 106.

[0019] Furthermore, the message server 102 is connected to a presence server 115. The presence server 115 includes third interface means 116, 117 for connecting the presence server to the message systems 105, 107. The third interface means 116, 117 receive information from the message systems 105, 106, which information indicates the availability of a recipient terminal 104, 106. The third interface means 116, 117 are then

connected to second processing means 118, such as a computer, which interprets the availability information in order to determine whether the recipient terminal 104, 106 is available or not. The result from the second processing means 118 is then sent to the first processing means 111 in the message server 102.

[0020] Referring now to figure 2, the originator can connect to the voice system 103 using a voice based communication terminal, such as a POTS telephone, mobile telephone etc., as the originator terminal 101. The connection is done via the fourth interface means 108. The voice system 103 is based on a system including voice recognition means 201 and conversion means 202 for conversion from voice-to-text and vice versa. The voice system 103 is connected to a voice based communication system. This type of voice system also includes a dialog server 203 for guiding the user through a session. The additional features of this voice system 103 are means for authentication (not shown) of the user before connecting to the message server 102, and adapting means 204 for adapting a voice command that has been converted to text into a text input that is applicable to a message server, such as the message server 102.

[0021] The message server 102 supports standard services for sending messages, such as e-mail and SMS messages, to mobile devices 104 or fixed devices 106. Various functions for these services can be effected by calling corresponding application software objects controlled by the first processing means 111 via the second interface means 110. These application software objects interact with the database 112 and effectuate the functions, such as e-mail and SMS functions. For example, there are application software objects for listing existing mail, reading mail, sending mail, deleting mail, sending SMS messages to mobile devices, managing simple address book look up and so on. Furthermore, it is possible for an originator to log on to the message server 102. This could be done directly or via the voice system 103. The same objects can be called via the voice system, providing the same functionality, as when connected directly to the message server 102.

[0022] For the originator to be able to call the application software objects controlled by the first processing means 111 in the message server 102 via the voice system 103, the voice system 103 supports a number of voice inputs corresponding to the application software objects. For example, if the user gives the voice input "get address", the voice recognition means 201 will recognize the voice input and the converting means 202 will convert the voice input to text. Then the adapting means 204 will adapt the text to a input that is applicable for calling the application software object for address lookup controlled by the message server 102 via the second interface means 110. Furthermore, the dialog server 203 in the voice system 103 guides the user through menus for executing the functions corresponding to the application software objects. For example, if

the user gives the voice input "send message", the voice system 103 may answer with the question "to which recipient". The voice system 103 may also include a help function providing the user with help information. For a further description, see the description below with reference to figure 5.

[0023] In figure 3, a part of the system in figure 1 is shown. A presence server 115 is connected to a device 301 that in turn is connected to the mobile network 105 to which the recipient's mobile telephone 104 is connected.

[0024] In one embodiment illustrated by figure 3, the device 301 is an SMS-C. In order to get information from the mobile network regarding the availability of the recipient's mobile telephone 104, the presence server 115 sends an SMS message to the recipient's mobile telephone 104 and waits for an acknowledgement message from the SMS-C 301. If there is an acknowledgement from the SMS-C within a specified period of time, the presence server 115 determines that the recipient's mobile telephone is available. Otherwise the presence server 115 determines that the recipient's mobile telephone is not available.

[0025] In another embodiment also illustrated by figure 3, the device 301 is an HLR or a VLR. In this case the presence server 115 receives information from the HLR 301 (or the VLR). This information determines whether the recipient's mobile telephone 104 is attached to the mobile telephone network 105, or rather if the subscriber associated to the SIM card in the recipient's mobile telephone is attached to the mobile network 105. If this is the case the presence server 115 determines that the recipient's mobile telephone 104 is available. Otherwise the presence server 115 determines that the recipient's mobile telephone 104 is not available.

[0026] In the embodiments in figures 1-3, the message server 102, the voice system 103 and the presence server 115 are depicted in block form indicating them to separate physical devices. Of course, the embodiments could also be implemented in one single device in which the means 108-114, 116-118 are incorporated as software or hardware modules.

[0027] Turning now to figure 4, a flow chart of an embodiment of a method according to the invention is shown. In step 401, one or more addresses of a recipient 104, 106, which addresses are associated to one or more message systems 105, 107, are stored in an address book. The address book could be a private address book of the originator or a central address book, which can be used by many different users. The addresses are linked to a recipient identification, which for example is used when the originator wants to look up the addresses of the recipient in the memory means 112. When an originator has connected to the message server 102 via the voice system 103 he or she can give a voice input including a recipient identification and a message. The voice system 103 then receives the voice

input in step 402. The voice system 103 then converts this voice input into text in step 403 and relays it to the message server 102. In step 404 a presence server 115 receives availability information regarding the recipient from the message systems 105, 107, to which the message server 102 is connected. The availability information is interpreted in step 405 so as to determine in which of the message systems 105, 107 the recipient is currently available. This information is then passed on to the message server 102. For a more detailed description on the availability information see the description below, with reference to figure 6 and 7. The message server then chooses one of the addresses of the recipient in step 406 and identifies the message system 105, 107 associated with the chosen address in step 407. In step 408 the message server 102 determines whether the message system associated to the chosen address uses text messages or voice messages. If a voice message is to be used the text message included in the originator input is converted back to voice in step 409. Alternatively, a recording of the original voice message is be used. If a text message is to be used no conversion is needed. Finally the message is sent to the recipient in step 410.

[0028] In figure 5 the operation of a voice system 103 and a message server 102 in accordance with an embodiment of the invention is shown. When an originator has connected to the voice system 103 the originator is authenticated in step 501. The originator may now give a voice input in step 502, such as a recipient identification that he or she wants to send a message to. The voice system 103 will interpret the voice input and convert it to text in step 503. The voice system will then call the application software object corresponding to the function in message server 102 desired by the originator via the second interface means 110 in step 504. The message server 102 will then execute the desired function in step 505. When the command has been executed, the message server 102 will return the result to the voice system 103 in step 507.

[0029] For example, if the originator gives the voice input "send message", the voice system 103 will recognize and interpret this, and ask to what recipient the message is to be sent. The originator will then state a recipient identification and the voice system 103 will convert it to text and call the application software object for address lookup in the message server 102 via the second interface means 110. The application software object for address lookup will execute an address look up in the memory means 112 based on the recipient identification stated by the originator. The result of the address lookup will be the addresses associated to the recipient identification. One of these addresses will then be chosen according to the method described with reference to figure 4 or according to some other way of choosing the address, such as choosing an address that has been defined to be a preferred address for communication. Alternatively, all of the addresses are chosen.

The message server 102 will then return the address to the voice system 103 and the voice system 103 will convert it to voice and play it back to the originator. Now, the voice system 103 will ask the originator to state a message. The originator states the message and the voice system 103 converts the message to text and call the appropriate application software object for sending a message via the first interface means 113, 114 in the message server 102. The message system to be used when sending the message is determined to be the message system 105, 107 associated with the chosen address. For example, if the address is an e-mail address the application software object for sending an e-mail will be used, and if the address is a mobile phone number the appropriate application software object for sending an SMS message will be used. The message will then be sent to the recipient via the first interface means 113, 114.

[0030] Turning now to figure 6, a flow chart with exemplifying operations for acquiring availability information in the embodiment referred to by figure 4 is shown. These operations are suitable when a recipient is to be reached in a cellular mobile telephone system 105. In step 601, the availability information is received as information of whether the recipient, or rather the subscriber associated to the SIM card in the recipient's mobile telephone 104, is attached to the cellular mobile telephone system 105. This information is received from an HLR 301 in the cellular mobile telephone system 105. In step 602, it is then determined, based on information from the HLR, whether the recipient is attached or not. If the recipient is attached, the recipient is determined to be available in the cellular mobile telephone system 105. If not, the recipient is determined not to be available in the cellular mobile telephone system 105. In an alternative embodiment, the information of whether the recipient is attached or not is received from an VLR in the cellular mobile telephone system 105.

[0031] In figure 7 a flow chart with another set of exemplifying operations for acquiring availability information in the embodiment referred to by figure 4 is shown. This embodiment is also suitable when a recipient is to be reached in a cellular mobile telephone system 105. In step 701, an SMS message is sent from the presence server 115 to an SMS-C 301 in the cellular mobile telephone system 105. The SMS-C 301 will then send an acknowledgement back to the presence server 115 if the message could be delivered. In step 702, it is then determined whether or not an acknowledgement has been received from the SMS-C 301 to the presence server 115 within a specified time limit. If that is the case, the recipient is determined to be available in the cellular mobile telephone system 105. If not, the recipient is determined not to be available in the cellular mobile telephone system 105. The SMS message sent in step 701 can either be an SMS message sent from the presence server 115 for test purposes in order to determine the availability of the recipient, or it can be a previously sent

message from an originator. In the latter case the presence server 115 will check the time of the latest reception of an acknowledgement of the delivery of a previously sent SMS message. If the time is within a predetermined time limit the presence server 115 will determine that the recipient is available. If not, the presence server will determine that the recipient is not available.

Claims

1. A method for enabling the sending of messages to a recipient (104,106) via any of a number of messaging systems (105,107) of different types, comprising the steps of:

storing (401) addresses for said recipient; and receiving (402) an originator input including an identification of said recipient; **characterized in that** it further comprises:

receiving (404) recipient availability information from said messaging systems; interpreting (405) said recipient availability information so as to determine in which of said messaging systems said recipient is currently available; choosing (406) an address among the stored addresses, which address is associated with a messaging system in which said recipient is currently available; and identifying (407) the messaging system associated with the chosen address.

2. The method according to claim 1, wherein one of said messaging systems is a cellular mobile system (105) and said recipient availability information includes an indication of whether a mobile unit (104) of said recipient is available or not.

3. The method according to claim 2, wherein said indication of whether said mobile unit of said recipient is available or not is an indication of whether said mobile unit of said recipient is attached to said cellular mobile system or not, further comprising the steps of:

determining (604) that said mobile unit of said recipient is available if said mobile unit of said recipient is attached to said cellular mobile system; and determining (605) that said mobile unit of said recipient is not available otherwise.

4. The method according to claim 3, wherein said indication of whether said mobile unit of said recipient is attached to said cellular mobile system or not is received from a Home Location Register (301) in

said cellular mobile system.

5. The method according to claim 3, wherein said indication of whether said mobile unit of said recipient is attached to said cellular mobile system or not is received from a Visitor Location Register (301) in said cellular mobile system.

6. The method according to claim 1, further comprising the steps of:

sending (701) a Short Message Service message to said mobile unit of said recipient via a Short Message Service Center in said cellular mobile system; determining (704) that said mobile unit of said recipient is available if an acknowledgement is received (702) from the Short Message Service Center within a time limit; and determining (703) that said mobile unit of said recipient is not available otherwise.

7. The method according to any one of the claims 1-6, further comprising the step of:

storing preferences for said recipient, which preferences includes an identification of a preferred address for communication,

wherein said chosen address is said preferred address.

8. The method according to any one of the claims 1-7, wherein said originator input further includes a message, further comprising the step of:

sending said message to said recipient via the messaging system associated with said chosen address.

9. The method according to any one of the claims 1-7, wherein said originator input is received as a voice input, further comprising the step of:

converting (403) said voice input to text.

10. The method according to claim 9, wherein the originator input further includes a message, further comprising the steps of:

determining the type of message, text or voice, used in the messaging system associated with said chosen address; and sending said message as said determined type of message to said recipient via the messaging system associated with said chosen address.

11. The method according to claim 8 or 10, wherein the

messaging system associated with said chosen address is a cellular mobile system, said chosen address is a mobile phone number of a mobile unit of said recipient, and the message is sent as a Short Message Service message via said cellular mobile system.

12. The method according to claim 8 or 10, wherein the messaging system associated with said chosen address is an e-mail system, said chosen address is an e-mail address of said recipient, and the message is sent as an e-mail via said e-mail system.

13. The method according to claim 10, further comprising the steps of:

receiving a reply message from said recipient as said determined type of message via the messaging system associated with said chosen address;
converting said reply message to voice if said reply message is a text message.

14. A system for enabling the sending of messages to a recipient via any of a number of messaging systems (105, 107) of different types, comprising:

first interface means (113, 114) connected to said messaging systems;
second interface means (110) for receiving an originator input including an identification of said recipient; and
memory means (112) for storing addresses for said recipient; **characterized in that** it further comprises:

third interface means (116, 117) for receiving recipient availability information from said messaging systems;
first processing means (111) for choosing an address of the stored addresses, and for identifying the messaging system associated to the chosen address; and
second processing means (118) for interpreting said recipient availability information so as to determine in which of said messaging systems said recipient is currently available,

wherein said first processing means are operatively connected to said second processing means and arranged to choose an address among the addresses associated with said messaging systems in which said recipient is currently available.

15. The system according to claim 14, wherein one of said messaging systems is a cellular mobile system and said third interface means are arranged to re-

ceive recipient availability information including an indication of whether a mobile unit (104) of said recipient is available or not.

16. The system according to claim 15, wherein said third interface means are arranged to receive said indication of whether said mobile unit of said recipient is available or not as an indication of whether said mobile unit of said recipient is attached to said cellular mobile system or not, and said second processing means are arranged to determine that said mobile unit of said recipient is available if said mobile unit of said recipient is attached to said cellular mobile system and to determine that said mobile unit of said recipient is not available otherwise.

17. The system according to claim 16, wherein said third interface means are arranged to receive said indication of whether said mobile unit of said recipient is attached to said cellular mobile system or not from a Home Location Register in said cellular mobile system.

18. The system according to claim 16, wherein said third interface means are arranged to receive said indication of whether said mobile unit of said recipient is attached to said cellular mobile system or not from a Visitor Location Register in said cellular mobile system.

19. The system according to claim 14, wherein said third interface means are further arranged to send a Short Message Service message to said mobile unit of said recipient via a Short Message Service Center in said cellular mobile system, and said second processing means are arranged to determine that said mobile unit of said recipient is available if an acknowledgement is received from the Short Message Service Center within a time limit and to determine that said mobile unit of said recipient is not available otherwise.

20. The system according to any one of the claims 14-19, wherein said memory means are further arranged to store preferences for said recipient, which preferences include an identification of a preferred address for communication, and said first processing means are arranged to choose said preferred address.

21. The system according to any one of the claims 14-20, wherein said originator input further includes a message, and said first interface means are arranged to send said message to said recipient via the messaging system associated with said chosen address.

22. The system according any one of the claims 18-20,

wherein said second interface means are arranged to receive said originator input as a text message, further comprising

fourth interface means (108) for receiving said originator input as a voice input, converting means (109) for converting said voice input to text, said converting means being connected to said second and said fourth interface means.

23. The system according to claim 22, wherein said first processing means are further arranged to determine the type of message, text or voice, used in the messaging system associated with said chosen address, and said first interface means are arranged to send said message as the determined type of message to said recipient via the messaging system associated with said chosen address.

24. The system according to claim 21 or 23, wherein the messaging system associated with said chosen address is a cellular mobile system, said chosen address is a mobile phone number of a mobile unit of said recipient, and said first interface means are further arranged to send said message as a Short Message Service message via said cellular mobile system.

25. The system according to claim 21 or 23, wherein the messaging system associated with said chosen address is an e-mail system, said chosen address is an e-mail address of said recipient, and said first interface means are further arranged to send the message as an e-mail via said e-mail system.

26. The system according to claim 23, wherein said first interface means are further arranged to receive a reply message from said recipient via one of said messaging system, and said converting means are further arranged to convert said reply message to voice if said reply message is a text message.

27. A computer readable medium having computer-executable instructions for performing the steps of:

storing addresses for said recipient; and receiving an originator input including an identification of said recipient; **characterized in that** it further comprises:

receiving recipient availability information from said messaging systems (105,107); and interpreting said recipient availability information so as to determine in which of said messaging systems said recipient is currently available;

choosing an address among the stored addresses, which address is associated with a messaging system in which said recipient is currently available; and identifying the messaging system associated with the chosen address.

28. The computer readable medium according to claim 27 having further computer-executable instructions for performing the step of:

storing preferences for said recipient, which preferences includes an identification of a preferred address for communication,

wherein the computer-executable instructions for performing the step of choosing an address among the stored addresses performs the step of:

choosing said preferred address.

29. The computer readable medium according to claim 27 or 28 having further computer-executable instructions for performing the steps of:

receiving an originator input including a message to said recipient; and sending said message to said recipient via the messaging system associated with the chosen address.

Patentansprüche

1. Verfahren, das das Senden von Nachrichten an einen Empfänger (104, 106) über ein beliebiges einer Anzahl von Nachrichtensystemen (105, 107) unterschiedlichen Typs ermöglicht und das die folgenden Schritte umfasst:

Speichern (401) von Adressen für den Empfänger; und

Empfangen (402) einer Absendereingabe, die eine Identifizierung des Empfängers enthält;

dadurch gekennzeichnet, dass es des Weiteren umfasst:

Empfangen (404) einer Empfängererreichbarkeits-information von den Nachrichtensystemen;

Interpretieren (405) der Empfängererreichbarkeits-Information, um festzustellen, in welchem der Nachrichtensysteme der Empfänger momentan verfügbar ist;

Wählen (406) einer Adresse aus den gespeicherten Adressen, wobei die Adresse mit einem Nachrichtensystem verbunden ist, in dem der Empfänger momentan verfügbar ist; und

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Identifizieren (407) des Nachrichtensystems, das mit der gewählten Adresse verbunden ist.

2. Verfahren nach Anspruch 1, wobei eines der Nachrichtensysteme ein zellulares Mobilsystem (105) ist und die Empfängererreichbarkeits-Information eine Anzeige dahingehend enthält, ob eine Mobileinheit (104) des Empfängers erreichbar ist oder nicht.

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3. Verfahren nach Anspruch 2, wobei die Anzeige dahingehend, ob die Mobileinheit des Empfängers erreichbar ist oder nicht, eine Anzeige dahingehend ist, ob die Mobileinheit des Empfängers an dem zellularen Mobilsystem angemeldet ist oder nicht, und das des Weiteren die folgenden Schritte umfasst:

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Feststellen (604), dass die Mobileinheit des Empfängers erreichbar ist, wenn die Mobileinheit des Empfängers an dem zellularen Mobilsystem angemeldet ist; und

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andernfalls Feststellen (605), dass die Mobileinheit des Empfängers nicht erreichbar ist.

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4. Verfahren nach Anspruch 3, wobei die Anzeige dahingehend, ob die Mobileinheit des Empfängers an dem zellularen Mobilsystem angemeldet ist oder nicht, von einem Standortverzeichnis (301) in dem zellularen Mobilsystem empfangen wird.

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5. Verfahren nach Anspruch 3, wobei die Anzeige dahingehend, ob die Mobileinheit des Empfängers an dem zellularen Mobilsystem angemeldet ist oder nicht, von einem Besucherverzeichnis (301) in dem zellularen Mobilsystem empfangen wird.

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6. Verfahren nach Anspruch 1, das des Weiteren die folgenden Schritte umfasst:

Senden (701) einer Kurznachrichtendienst (short message service-SMS)-Nachricht an die Mobileinheit des Empfängers über ein SMS-Zentrum in dem zellularen Mobilsystem;

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Feststellen (704), dass die Mobileinheit des Empfängers erreichbar ist, wenn eine Bestätigung von dem SMS-Zentrum innerhalb einer Zeitbegrenzung empfangen wird (702); und

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andernfalls Feststellen (703), dass die Mobileinheit des Empfängers nicht erreichbar ist.

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7. Verfahren nach einem der Ansprüche 1-6, das des

Weiteren den folgenden Schritt umfasst:

Speichern von Präferenzen für den Empfänger, wobei die Präferenzen eine Identifizierung einer bevorzugten Kommunikationsadresse enthalten,

wobei die gewählte Adresse die bevorzugte Adresse ist.

8. Verfahren nach einem der Ansprüche 1-7, wobei die Absendereingabe des Weiteren eine Nachricht enthält, und das des Weiteren den folgenden Schritt umfasst:

Senden einer Nachricht an den Empfänger über das Nachrichtensystem, das mit der gewählten Adresse verbunden ist.

9. Verfahren nach einem der Ansprüche 1-7, wobei die Absendereingabe als eine Spracheingabe empfangen wird, und das des Weiteren den folgenden Schritt umfasst:

Umwandeln (403) der Spracheingabe in Text.

10. Verfahren nach Anspruch 9, wobei die Absendereingabe des Weiteren eine Nachricht enthält, und das des Weiteren die folgenden Schritte umfasst:

Feststellen des Typs der Nachricht, d.h. Text oder Sprache, der in dem Nachrichtensystem verwendet wird, das mit der gewählten Adresse verbunden ist; und

Senden der Nachricht als den festgestellten Typ Nachricht an den Empfänger über das Nachrichtensystem, das mit der gewählten Adresse verbunden ist.

11. Verfahren nach Anspruch 8 oder 10, wobei das Nachrichtensystem, das mit der gewählten Adresse verbunden ist, ein zellulares Mobilsystem ist, die gewählte Adresse eine Mobiltelefonnummer einer Mobileinheit des Empfängers ist und die Nachricht als eine SMS-Nachricht über das zellulare Mobilsystem gesendet wird.

12. Verfahren nach Anspruch 8 oder 10, wobei das Nachrichtensystem, das mit der gewählten Adresse verbunden ist, ein E-Mail-System ist, die gewählte Adresse eine E-Mail-Adresse des Empfängers ist und die Nachricht als eine E-Mail über das E-Mail-System gesendet wird.

13. Verfahren nach Anspruch 10, das des Weiteren die folgenden Schritte umfasst:

Empfangen einer Antwortnachricht von dem Empfänger als der festgestellte Typ Nachricht über das Nachrichtensystem, das mit der gewählten Adresse verbunden ist;

Umwandeln der Antwortnachricht in Sprache, wenn die Antwortnachricht eine Textnachricht ist.

14. System, das das Senden von Nachrichten an einen Empfänger über ein beliebiges einer Anzahl von Nachrichtensystemen (105, 107) unterschiedlichen Typs ermöglicht, und das umfasst:

eine erste Schnittstelleneinrichtung (113, 114), die mit den Nachrichtensystemen verbunden ist;

eine zweite Schnittstelleneinrichtung (110) zum Empfangen einer Absendereingabe, die eine Identifizierung des Empfängers enthält; und

eine Speichereinrichtung (112) zum Speichern von Adressen für den Empfänger;

dadurch gekennzeichnet, dass es des Weiteren umfasst:

eine dritte Schnittstelleneinrichtung (116, 117) zum Empfangen einer Empfängererreichbarkeits-Information von den Nachrichtensystemen;

eine erste Verarbeitungseinrichtung (111) zum Wählen einer Adresse aus den gespeicherten Adressen und zum Identifizieren des Nachrichtensystems, das mit der ausgewählten Adresse verbunden ist; und

eine zweite Verarbeitungseinrichtung (118) zum Interpretieren der Empfängererreichbarkeits-Information, um festzustellen, in welchem der Nachrichtensysteme der Empfänger momentan erreichbar ist,

wobei die erste Verarbeitungseinrichtung funktionell mit der zweiten Verarbeitungseinrichtung verbunden und so eingerichtet ist, dass sie eine Adresse aus den Adressen wählt, die mit den Nachrichtensystemen verbunden sind, in denen der Empfänger momentan erreichbar ist.

15. System nach Anspruch 14, wobei eines der Nachrichtensysteme ein zelluläres Mobilsystem ist und die dritte Schnittstelleneinrichtung so eingerichtet ist, dass sie Empfängererreichbarkeits-Information empfängt, die eine Anzeige dahingehend enthält, ob eine Mobileinheit (104) des Empfängers erreichbar

bar ist oder nicht.

16. System nach Anspruch 15, wobei die dritte Schnittstelleneinrichtung so eingerichtet ist, dass sie die Anzeige dahingehend, ob die Mobileinheit des Empfängers erreichbar ist oder nicht, als eine Anzeige dahingehend empfängt, ob die Mobileinheit des Empfängers an dem zellulären Mobilsystem angemeldet ist oder nicht, und die zweite Verarbeitungseinrichtung so eingerichtet ist, dass sie feststellt, dass die Mobileinheit des Empfängers erreichbar ist, wenn die Mobileinheit des Empfängers an dem zellulären Mobilsystem angemeldet ist, und andernfalls feststellt, dass die Mobileinheit des Empfängers nicht erreichbar ist.

17. System nach Anspruch 16, wobei die dritte Schnittstelleneinrichtung so eingerichtet ist, dass sie die Anzeige dahingehend, ob die Mobileinheit des Empfängers an dem zellulären Mobilsystem angemeldet ist oder nicht, von einem Standortverzeichnis in dem zellulären Mobilsystem empfängt.

18. System nach Anspruch 16, wobei die dritte Schnittstelleneinrichtung so eingerichtet ist, dass sie die Anzeige dahingehend, ob die Mobileinheit des Empfängers an dem zellulären Mobilsystem angemeldet ist oder nicht, von einem Besucherverzeichnis in dem zellulären Mobilsystem empfängt.

19. System nach Anspruch 14, wobei die dritte Schnittstelleneinrichtung des Weiteren so eingerichtet ist, dass sie eine SMS-Nachricht an die Mobileinheit des Empfängers über ein SMS-Zentrum in dem zellulären Mobilsystem sendet, und die zweite Verarbeitungseinrichtung so eingerichtet ist, dass sie feststellt, dass die Mobileinheit des Empfängers erreichbar ist, wenn eine Bestätigung von dem SMS-Zentrum innerhalb einer Zeitbegrenzung empfangen wird, und andernfalls feststellt, dass die Mobileinheit des Empfängers nicht erreichbar ist.

20. System nach einem der Ansprüche 14-19, wobei die Speichereinrichtung des Weiteren Präferenzen für den Empfänger speichert und die Präferenzen eine Identifizierung einer bevorzugten Kommunikationsadresse enthalten, und die erste Verarbeitungseinrichtung so eingerichtet ist, dass sie die bevorzugte Adresse wählt.

21. System nach einem der Ansprüche 14-20, wobei die Absendereingabe des Weiteren eine Nachricht enthält und die erste Schnittstelleneinrichtung so eingerichtet ist, dass sie die Nachricht an den Empfänger über das Nachrichtensystem sendet, das mit der gewählten Adresse verbunden ist.

22. System nach einem der Ansprüche 18-20, wobei

die zweite Schnittstelleneinrichtung so eingerichtet ist, dass sie die Absendereingabe als eine Textnachricht empfängt, und das des Weiteren umfasst:

eine vierte Schnittstelleneinrichtung (108), die die Absendereingabe als Spracheingabe empfängt,

eine Umwandlungseinrichtung (109), die die Spracheingabe in Text umwandelt,

wobei die Umwandlungseinrichtung mit der zweiten und der vierten Schnittstelleneinrichtung verbunden ist.

23. System nach Anspruch 22, wobei die erste Verarbeitungseinrichtung des Weiteren so eingerichtet ist, dass sie den Typ Nachricht, d.h. Text oder Sprache, bestimmt, der in dem Nachrichtensystem verwendet wird, das mit der gewählten Adresse verbunden ist, und die erste Schnittstelleneinrichtung so eingerichtet ist, dass sie die Nachricht als den festgestellten Typ Nachricht an den Empfänger über das Nachrichtensystem sendet, das mit der gewählten Adresse verbunden ist.

24. System nach Anspruch 21 oder 23, wobei das Nachrichtensystem, das mit der ausgewählten Adresse verbunden ist, ein zelluläres Mobilsystem ist, die gewählte Adresse eine Mobiltelefonnummer einer Mobileinheit des Empfängers ist und die erste Schnittstelleneinrichtung des Weiteren so eingerichtet ist, dass sie die Nachricht als SMS-Nachricht über das zelluläre Mobilsystem sendet.

25. System nach Anspruch 21 oder 23, wobei das Nachrichtensystem, das mit der ausgewählten Adresse verbunden ist, ein E-Mail-System ist, die gewählte Adresse eine E-Mail-Adresse des Empfängers ist und die erste Schnittstelleneinrichtung des Weiteren so eingerichtet ist, dass sie die Nachricht als eine E-Mail über das E-Mail-System sendet.

26. System nach Anspruch 23, wobei die erste Schnittstelleneinrichtung des Weiteren so eingerichtet ist, dass sie eine Antwortnachricht von dem Empfänger über eines der Nachrichtensysteme empfängt und die Umwandlungseinrichtung des Weiteren so eingerichtet ist, dass sie die Antwortnachricht in Sprache umwandelt, wenn die Antwortnachricht eine Textnachricht ist.

27. Computerlesbares Medium mit durch Computer ausführbaren Befehlen zum Durchführen der folgenden Schritte:

Speichern von Adressen für den Empfänger;

und

Empfangen einer Absendereingabe, der eine Identifizierung des Empfängers enthält;

dadurch gekennzeichnet, dass es des Weiteren umfasst:

Empfangen einer Empfängererreichbarkeits-Information von den Nachrichtensystemen (105, 107); und

Interpretieren der Empfängererreichbarkeits-Information, um festzustellen, in welchem der Nachrichtensysteme der Empfänger momentan erreichbar ist;

Wählen einer Adresse aus den gespeicherten Adressen, wobei die Adresse mit einem Nachrichtensystem verbunden ist, in dem der Empfänger momentan erreichbar ist; und

Identifizieren des Nachrichtensystems, das mit der gewählten Adresse verbunden ist.

28. Computerlesbares Medium nach Anspruch 27, das des Weiteren durch Computer ausführbare Befehle zum Durchführen der folgenden Schritte aufweist:

Speichern von Präferenzen für den Empfänger, wobei die Präferenzen eine Identifizierung einer bevorzugten Adresse zur Kommunikation enthalten,

wobei die durch Computer ausführbaren Befehle zum Durchführen des Schritts des Wählens einer Adresse aus den gespeicherten Adressen den folgenden Schritt durchführen:

Wählen der bevorzugten Adresse.

29. Computerlesbares Medium nach Anspruch 27 oder 28, das des Weiteren durch Computer ausführbare Befehle zum Durchführen der folgenden Schritte aufweist:

Empfangen einer Absendereingabe, die eine Nachricht an den Empfänger enthält; und

Senden der Nachricht an den Empfänger über das Nachrichtensystem, das mit der gewählten Adresse verbunden ist.

Revendications

1. Procédé permettant l'envoi de messages à un destinataire (104, 106) par l'intermédiaire de l'un quel-

conque d'un certain nombre de systèmes de messagerie (105, 107) de types différents, comprenant les opérations suivantes :

stocker (401) des adresses relatives audit destinataire; et
recevoir (402) un signal d'entrée de demandeur comportant une identification dudit destinataire ;

caractérisé en ce qu'il comprend en outre les opérations suivantes :

recevoir (404) des informations relatives à la disponibilité du destinataire de la part desdits systèmes de messagerie ;
interpréter (405) lesdites informations relatives à la disponibilité du destinataire de façon à déterminer celui desdits systèmes de messagerie dans lequel ledit destinataire est présentement disponible ;
choisir (406) une adresse parmi les adresses stockées, laquelle adresse est associée à un système de messagerie dans lequel ledit destinataire est présentement disponible ; et
identifier (407) le système de messagerie associé à l'adresse choisie.

2. Procédé selon la revendication 1, où l'un desdits systèmes de messagerie est un système de téléphonie mobile cellulaire (105) et lesdites informations relatives à la disponibilité du destinataire comportent une indication du fait qu'une unité mobile (104) dudit destinataire est ou non disponible.

3. Procédé selon la revendication 2, où l'indication du fait que ladite unité mobile dudit destinataire est ou non disponible est une indication du fait que ladite unité mobile dudit destinataire est ou non connectée audit système de téléphonie mobile cellulaire, le procédé comprenant en outre les opérations suivantes :

déterminer (604) que ladite unité mobile dudit destinataire est disponible si ladite unité mobile dudit destinataire est connectée audit système de téléphonie mobile cellulaire ; et
déterminer (605), dans les autres cas, que ladite unité mobile dudit destinataire n'est pas disponible.

4. Procédé selon la revendication 3, où ladite indication du fait que ladite unité mobile dudit destinataire est ou non connectée audit système de téléphonie mobile cellulaire est reçue en provenance d'un registre des positions initiales, noté HLR, (301) se trouvant dans ledit système de téléphonie mobile cellulaire.

5. Procédé selon la revendication 3, où ladite indication du fait que ladite unité mobile dudit destinataire est ou non connectée audit système de téléphonie mobile cellulaire est reçue en provenance d'un registre des positions des visiteurs, noté VLR, (301) se trouvant dans ledit système de téléphonie mobile cellulaire.

6. Procédé selon la revendication 1, comprenant en outre les opérations suivantes :

envoyer (701) un message du type "service des messages courts", noté SMS, à ladite unité mobile dudit destinataire via un centre de SMS se trouvant dans ledit système de téléphonie mobile cellulaire ;
déterminer (704) que ladite unité mobile dudit destinataire est disponible si, dans une certaine limite de temps, un accusé de réception a été reçu (702) de la part du centre de SMS ; et
déterminer (703), dans les autres cas, que ladite unité mobile dudit destinataire n'est pas disponible.

7. Procédé selon l'une quelconque des revendications 1 à 6, comprenant en outre l'opération suivante :

stocker des préférences se rapportant audit destinataire, lesquelles préférences comportent l'identification de l'adresse préférée de communications,

où ladite adresse choisie est ladite adresse préférée.

8. Procédé selon l'une quelconque des revendications 1 à 7, où ledit signal d'entrée du demandeur comporte en outre un message, le procédé comprenant en outre l'opération suivante :

envoyer ledit message audit destinataire via le système de messagerie associé à ladite adresse choisie.

9. Procédé selon l'une quelconque des revendications 1 à 7, où ledit signal d'entrée du demandeur est reçu sous forme d'un signal d'entrée vocal, le procédé comprenant en outre l'opération suivante :

convertir (403) ledit signal d'entrée vocal en texte.

10. Procédé selon la revendication 9, où le signal d'entrée du demandeur comporte en outre un message, le procédé comprenant en outre les opérations suivantes :

déterminer le type de message, texte ou signal

vocal, utilisé dans le système de messagerie associé à ladite adresse choisie ; et envoyer ledit message au titre dudit type déterminé de message audit destinataire via le système de messagerie associé à ladite adresse choisie.

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11. Procédé selon la revendication 8 ou 10, où le système de messagerie associé à ladite adresse choisie est un système de téléphonie mobile cellulaire, ladite adresse choisie est un numéro de téléphone mobile d'une unité mobile dudit destinataire, et le message est envoyé sous forme d'un message SMS via ledit système de téléphonie mobile cellulaire.

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12. Procédé selon la revendication 8 ou 10, où le système de messagerie associé à ladite adresse choisie est un système de messagerie électronique, ladite adresse choisie est une adresse de messagerie électronique dudit destinataire, et le message est envoyé sous forme d'un courrier électronique via ledit système de messagerie électronique.

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13. Procédé selon la revendication 10, comprenant en outre les opérations suivantes :

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recevoir un message de réponse de la part dudit destinataire sous forme dudit type déterminé de message via le système de messagerie associé à ladite adresse choisie ; convertir ledit message de réponse en signal vocal si ledit message de réponse est un message du type texte.

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14. Système destiné à permettre l'envoi de messages à un destinataire via l'un quelconque d'un certain nombre de systèmes de messagerie (105, 107) de types différents, comprenant:

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un premier moyen d'interface (113, 114) connecté auxdits systèmes de messagerie ; un deuxième moyen d'interface (110) servant à recevoir un signal d'entrée de demandeur comportant une identification dudit destinataire ; et un moyen de mémorisation (112) servant à stocker des adresses relatives audit destinataire ;

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caractérisé en ce qu'il comprend en outre :

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un troisième moyen d'interface (116, 117) servant à recevoir des informations relatives à la disponibilité du destinataire de la part desdits systèmes de messagerie ; un premier moyen de traitement (111) servant à choisir une adresse parmi les adresses stockées et à identifier le système de messagerie

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associé à l'adresse choisie ; et un deuxième moyen de traitement (118) servant à interpréter lesdites informations relatives à la disponibilité du destinataire de façon à déterminer celui desdits systèmes de messagerie dans lequel ledit destinataire est présentement disponible,

où ledit premier moyen de traitement est fonctionnellement connecté audit deuxième moyen de traitement et est conçu pour choisir une adresse, parmi les adresses associées auxdits systèmes de messagerie, à laquelle ledit destinataire est présentement disponible.

15. Système selon la revendication 14, où l'un desdits systèmes de messagerie est un système de téléphonie mobile cellulaire et ledit troisième moyen d'interface est conçu pour recevoir des informations relatives à la disponibilité du destinataire, qui comportent une indication du fait qu'une unité mobile (104) dudit destinataire est ou non disponible.

16. Système selon la revendication 15, où ledit troisième moyen d'interface est conçu pour recevoir ladite indication du fait que ladite unité mobile dudit destinataire est ou non disponible au titre d'une indication du fait que ladite unité mobile dudit destinataire est ou non connectée audit système de téléphonie mobile cellulaire, et ledit deuxième moyen de traitement est conçu pour déterminer que ladite unité mobile dudit destinataire est disponible si ladite unité mobile dudit destinataire est connectée audit système de téléphonie mobile cellulaire et, dans les autres cas, pour déterminer que ladite unité mobile dudit destinataire n'est pas disponible.

17. Système selon la revendication 16, où ledit troisième moyen d'interface est conçu pour recevoir ladite indication du fait que ladite unité mobile dudit destinataire est ou non connectée audit système de téléphonie mobile cellulaire en provenance d'un registre des positions initiales, noté HLR, se trouvant dans ledit système de téléphonie mobile cellulaire.

18. Système selon la revendication 16, où ledit troisième moyen d'interface est conçu pour recevoir ladite indication du fait que ladite unité mobile dudit destinataire est ou non connectée audit système de téléphonie mobile cellulaire en provenance d'un registre des positions des visiteurs, noté VLR, se trouvant dans ledit système de téléphonie mobile cellulaire.

19. Système selon la revendication 14, où ledit troisième moyen d'interface est en outre conçu pour envoyer un message du type "service des messages courts", noté SMS, à ladite unité mobile dudit des-

tinataire via un centre de SMS se trouvant dans ledit système de téléphonie mobile cellulaire, et ledit deuxième moyen de traitement est conçu pour déterminer que ladite unité mobile dudit destinataire est disponible si un accusé de réception est reçu de la part du centre de SMS dans une certaine limite de temps et pour déterminer, dans les autres cas, que ladite unité mobile dudit destinataire n'est pas disponible.

20. Système selon l'une quelconque des revendications 14 à 19, où ledit moyen de mémorisation est en outre conçu pour stocker des préférences relatives audit destinataire, lesquelles préférences comportent l'identification d'une adresse préférée de communications, et ledit premier moyen de traitement est conçu pour choisir ladite adresse préférée.

21. Système selon l'une quelconque des revendications 14 à 20, où ledit signal d'entrée du demandeur comporte en outre un message, et ledit premier moyen d'interface est conçu pour envoyer ledit message audit destinataire via le système de messagerie associé à ladite adresse choisie.

22. Système selon l'une quelconque des revendications 18 à 20, où ledit deuxième moyen d'interface est conçu pour recevoir ledit signal d'entrée du demandeur sous forme d'un message de texte, le système comprenant en outre :

un quatrième moyen d'interface (108) servant à recevoir ledit signal d'entrée du demandeur sous forme d'un signal d'entrée vocal, un moyen de conversion (109) servant à convertir ledit signal d'entrée vocal en texte, ledit moyen de conversion étant connecté auxdits deuxième et quatrième moyens d'interface.

23. Système selon la revendication 22, où ledit premier moyen de traitement est en outre conçu pour déterminer le type de message, texte ou signal vocal, utilisé dans le système de messagerie associé à ladite adresse choisie, et ledit premier moyen d'interface est conçu pour envoyer ledit message sous forme du type déterminé de message audit destinataire via le système de messagerie associé à ladite adresse choisie.

24. Système selon la revendication 21 ou 23, où ledit système de messagerie associé à ladite adresse choisie est un système de téléphonie mobile cellulaire, ladite adresse choisie est un numéro de téléphone mobile d'une unité mobile dudit destinataire, et ledit premier moyen d'interface est en outre conçu pour envoyer ledit message sous forme d'un message SMS via ledit système de téléphonie mo-

bile cellulaire.

25. Système selon la revendication 21 ou 23, où le système de messagerie associé à ladite adresse choisie est un système de messagerie électronique, ladite adresse choisie est une adresse de messagerie électronique dudit destinataire, et ledit premier moyen d'interface est en outre conçu pour envoyer le message sous forme d'un courrier électronique via ledit système de messagerie électronique.

26. Système selon la revendication 23, où ledit premier moyen d'interface est en outre conçu pour recevoir un message de réponse de la part dudit destinataire via l'un desdits systèmes de messagerie, et ledit moyen de conversion est en outre conçu pour convertir ledit message de réponse en signal vocal si ledit message de réponse est un message du type texte.

27. Support pouvant être lu par un ordinateur, possédant des instructions pouvant être exécutées par un ordinateur afin d'effectuer les opérations suivantes :

stocker des adresses relatives audit destinataire ; et
recevoir un signal d'entrée de demandeur comportant une identification dudit destinataire ;

caractérisé en ce qu'il comprend en outre les opérations suivantes :

recevoir des informations relatives à la disponibilité du destinataire en provenance desdits systèmes de messagerie (105, 107) ; et
interpréter lesdites informations relatives à la disponibilité du destinataire afin de déterminer celui desdits systèmes de messagerie dans lequel ledit destinataire est présentement disponible ;
choisir une adresse parmi les adresses stockées, laquelle adresse est associée à un système de messagerie dans lequel ledit destinataire est présentement disponible ; et
identifier le système de messagerie associé à l'adresse choisie.

28. Support pouvant être lu par un ordinateur selon la revendication 27, possédant en outre des instructions pouvant être exécutées par un ordinateur afin d'effectuer l'opération suivante :

stocker des préférences relatives audit destinataire, lesquelles préférences comportent l'identification d'une adresse préférée pour les communications,

où les instructions pouvant être exécutées par un ordinateur afin d'effectuer l'opération consistant à choisir une adresse parmi les adresses stockées effectuent l'opération suivante :

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choisir ladite adresse préférée.

29. Support pouvant être lu par un ordinateur selon la revendication 27 ou 28, possédant en outre des instructions pouvant être exécutées par un ordinateur afin d'effectuer les opérations suivantes :

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recevoir un signal d'entrée de demandeur comportant un message à destination dudit destinataire ; et
envoyer ledit message audit destinataire via le système de messagerie qui est associé à l'adresse choisie.

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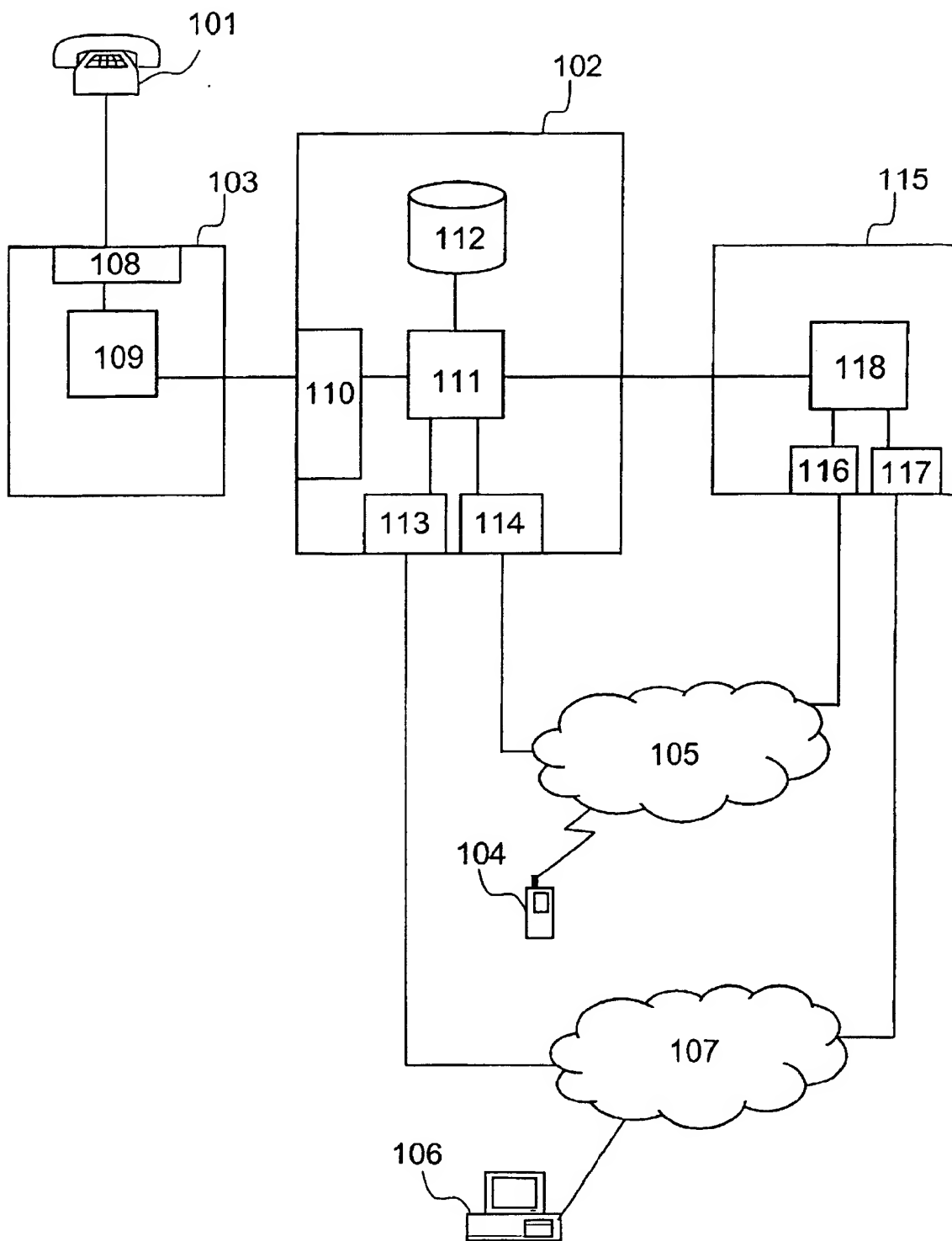


FIGURE 1

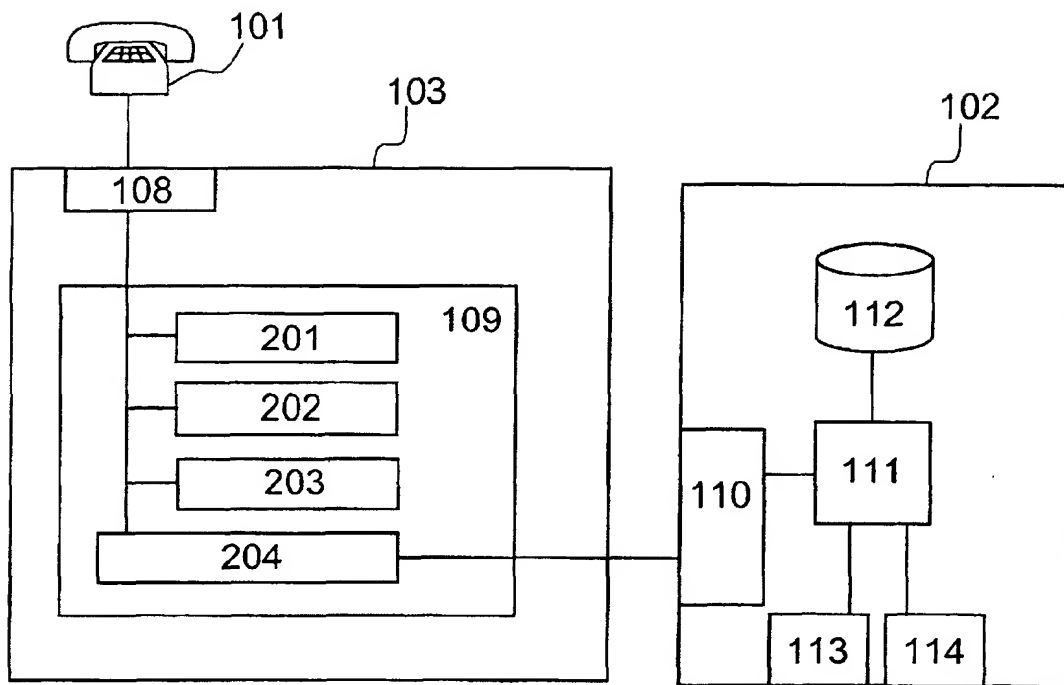


FIGURE 2

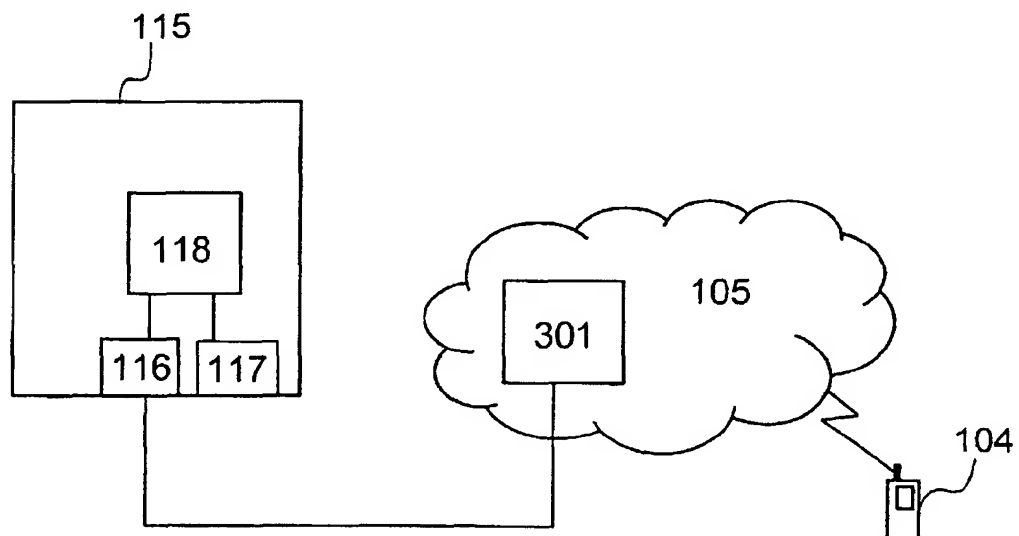


FIGURE 3

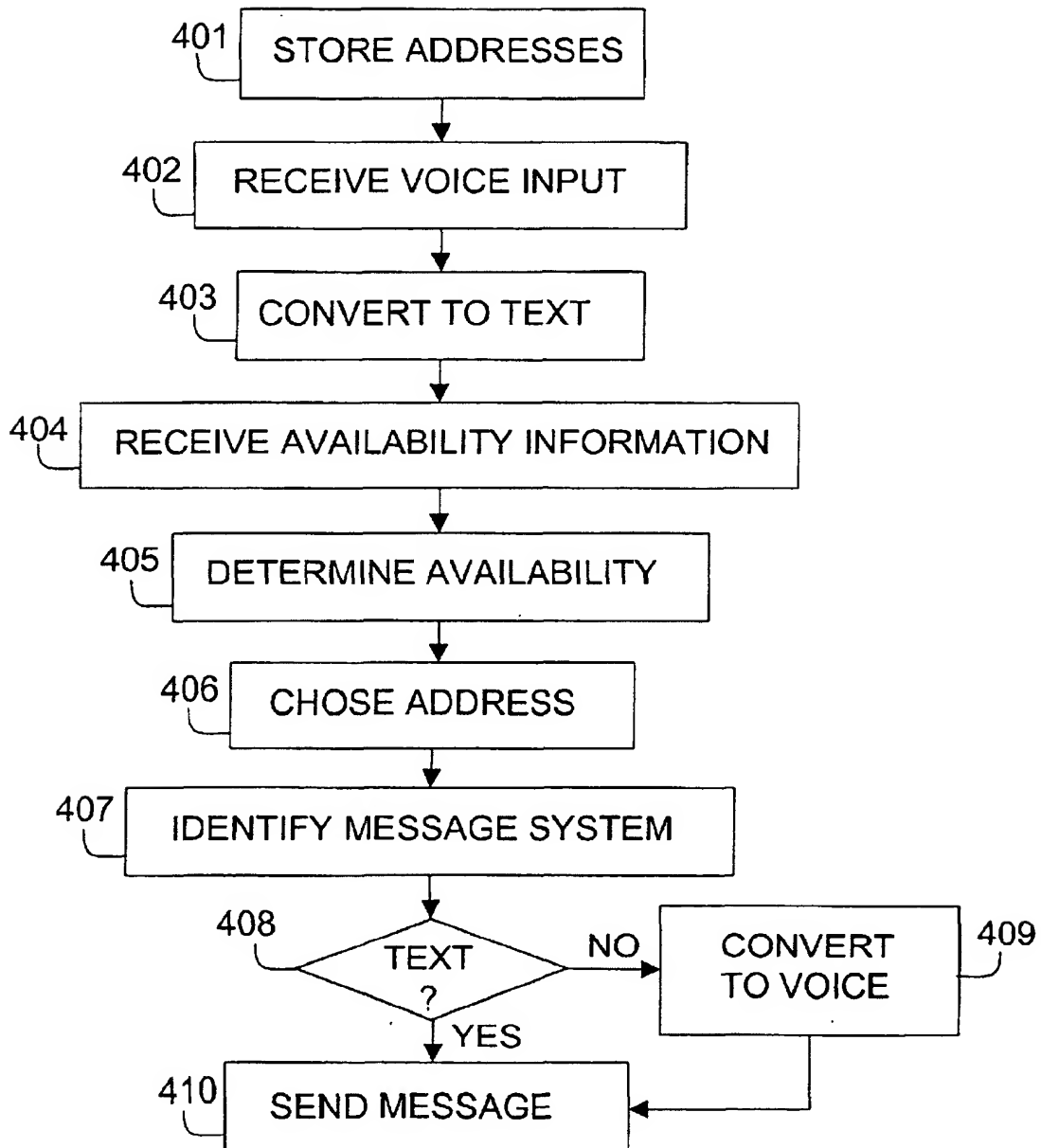


FIGURE 4

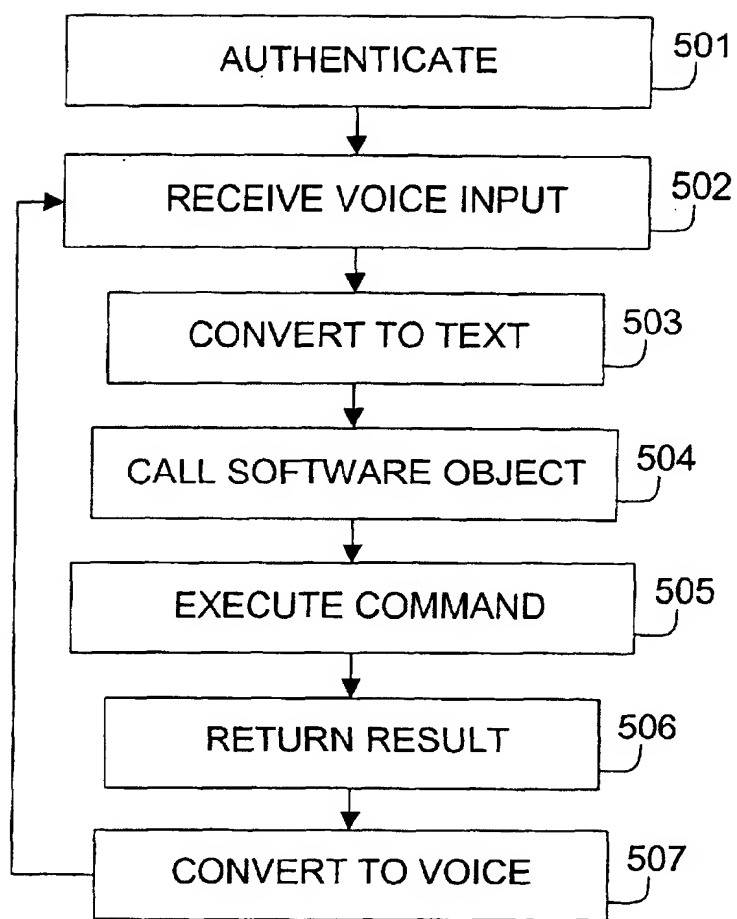


FIGURE 5

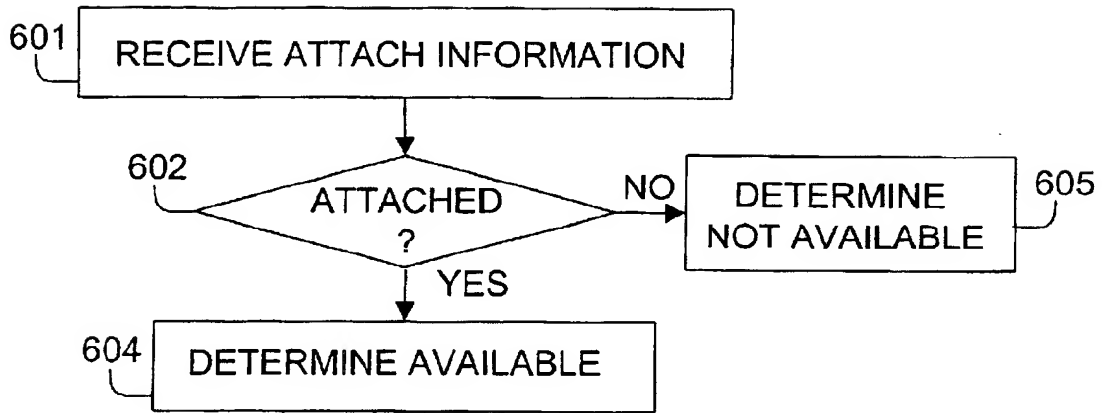


FIGURE 6

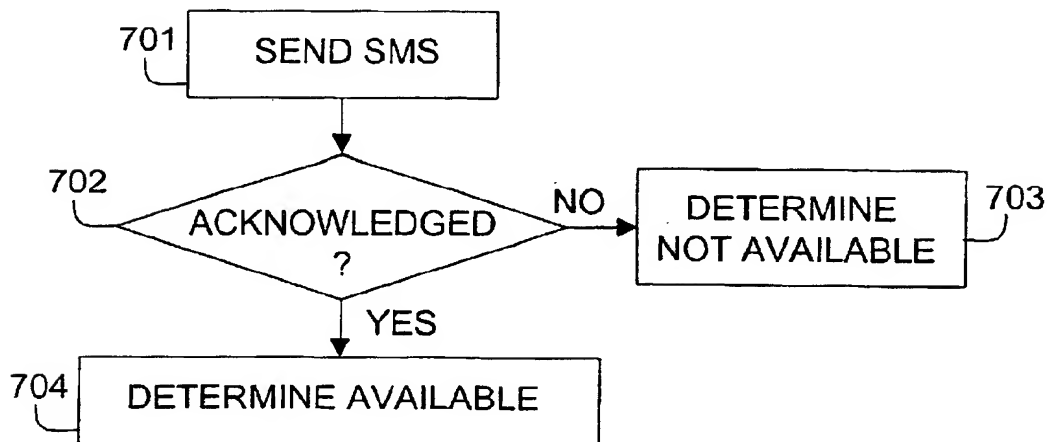


FIGURE 7